



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0247; Directorate Identifier 2013-CE-001-AD; Amendment 39-17397; AD 2013-06-02]

RIN 2120-AA64

Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments

SUMMARY: We are adopting a new airworthiness directive (AD) for Diamond Aircraft Industries GmbH Models DA 42 M-NG and DA 42 NG airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as the engine air inlet filter is subject to icing. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamond-air.at>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No.: 2012-0269, dated December 19, 2012 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Three occurrences of in-flight engine control unit (ECU) A/B caution initiation were reported which were followed by an un-commanded power reduction. All of these events happened in snow or moist conditions and resolved themselves in warmer air conditions. The subsequent investigation identified that the engine air inlet filter is subject to icing under certain, currently not fully identified, icing conditions.

The DA 42 NG is equipped with a manually controlled alternate air valve which bypasses the inlet air filter and provides sufficient air to the engine. The aeroplane flight manual (AFM) procedures include procedure for activation of the alternate air valve in case of power loss but these procedures were not applied by the pilots in these events.

The DA 42 NG is certified for flights in known icing conditions during which engine inlet filter icing may occur, therefore it is expected that flights into suspected icing conditions, where inlet filter icing may occur, is more likely.

Additional occurrence of dual ECU A/B caution initiation was reported followed by loss of power and loss of flight altitude. Again, the alternate air valve was not opened, which would have immediately resolved the situation.

It has been recognized that the engine control ECU A/B caution triggers the pilot to focus on engine electrical or fuel supply problem and thus causes a misinterpretation of the situation. It has also been identified that the conditions during which air filter icing may occur could include the critical take-off and climb phase.

This condition, if not corrected, could lead to a loss of engine power and reduced controllability of the aeroplane.

To address this unsafe condition, DAI revised Supplement S03 “Ice Protection System” to the aeroplane AFM and issued Service Information

SI 42NG-039 to advise the owners and pilots of the proper use of the engine alternate air.

For the reasons described above, this AD requires revision of the aeroplane AFM to incorporate updated Normal and Abnormal Operating procedures for alternate air valve operation during suspected rain, snow or visible moisture conditions.

The requirement of this AD is considered as an interim action. DAI is currently developing a modification that addresses the unsafe condition identified in this AD.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Diamond Aircraft Industries GmbH has issued the following service information:

- Service Information No. SI 42NG-039, dated November 14, 2012;
- DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.15-E, dated November 20, 2012;
- DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.16-E, dated November 20, 2012; and
- DA 42 NG AFM Temporary Revision TR-OÄM-42-200/a, Doc. #7.01.15-E, dated November 30, 2012.

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Interim Action

We consider this AD interim action. The type certificate holder is looking at developing a modification that addresses the unsafe condition identified in this AD. When this modification is established, we may take additional rulemaking action to mandate the modification.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because this condition, if not corrected, could lead to a loss of engine power and reduced controllability of the airplane. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-0247; Directorate Identifier 2013-CE-001-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD will affect 26 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic

requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$0 per product.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$2,210, or \$85 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2013-06-02 **Diamond Aircraft Industries GmbH:** Amendment 39-17397; Docket No. FAA-2013-0247; Directorate Identifier 2013-CE-001-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Diamond Aircraft Industries GmbH Models DA 42 M-NG and DA 42 NG airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 71: Power Plant.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as the engine air inlet filter is subject to icing. We are issuing this AD to address the unsafe condition on these products.

(f) Actions and Compliance

Unless already done, do the following actions within 30 days after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD).

(1) For Model DA 42 NG airplanes: Incorporate the following into the applicable pilot's operating handbook (POH)/FAA-approved airplane flight manual (AFM) into the applicable sections:

(i) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.15-E, dated November 20, 2012;

(ii) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.16-E, dated November 20, 2012; and

(iii) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-OÄM-42-200/a, Doc. #7.01.15-E, dated November 30, 2012.

(2) For Model DA 42 M-NG airplanes: Incorporate the following into the applicable POH/FAA-approved AFM into the applicable sections:

(i) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.15-E, dated November 20, 2012;

(ii) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-OÄM-42-200/a, Doc. #7.01.15-E, dated November 30, 2012.

(3) The actions required by paragraphs (f)(1) and (f)(2) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR § 43.9 (a)(1)-(4) and 14 CFR § 91.417(a)(2)(v). The record must be maintained as required by 14 CFR § 91.417, 121.380, or 135.439.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of

information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2012-0269, dated December 19, 2012; and Diamond Aircraft Industries GmbH Service Information No. SI 42NG-039, dated November 14, 2012, for related information.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.15-E, dated November 20, 2012;

(ii) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-MÄM 42-701, Doc. 7.01.16-E, dated November 20, 2012; and

(iii) Diamond Aircraft DA 42 NG AFM Temporary Revision TR-OÄM-42-200/a, Doc. #7.01.15-E, dated November 30, 2012.

(3) For Diamond Aircraft Industries GmbH service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamond-air.at>.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/index.html>.

Issued in Kansas City, Missouri on March 7, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2013-05989 Filed 03/15/2013 at 8:45 am; Publication Date: 03/18/2013]